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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,478	12/20/2001	Richard Pederson	3123-394	5465
32093	7590	01/31/2006		
HANSRA PATENT SERVICES 4525 GLEN MEADOWS PLACE BELLINGHAM, WA 98226			EXAMINER RODRIGUEZ, GLENDA P	
			ART UNIT	PAPER NUMBER
			2651	
DATE MAILED: 01/31/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/029,478	Applicant(s) PEDERSON ET AL.	
	Examiner Glenda P. Rodriguez	Art Unit 2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 21-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Takahashi (US Patent No. 6, 101, 053).

Takahashi teaches a method comprising:

Providing a disk drive having a write head for writing data to a disk surface and a read head for reading data from said disk surface (Col. 4, L. 7-9);

Sensing a temperature of a disk drive in order to determine an optimal write current for said write head associated with said temperature (with Element 17);

Determining a maximum write current which satisfies a predetermined bit error rate (Col. 9, L. 60-67);

Determining whether the maximum write current which satisfies said predetermined bit error rate satisfies a write induced instability test associated with reading data from said disk surface using said read head (Col. 10, L. 22-44);

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If said maximum write current which satisfies said predetermined bit error rate does not satisfy said write induced instability test, then reducing said maximum write current until said write induced instability test is satisfied (Col. 10, L. 22-44).

Claim (25) has limitations similar to those treated in the above rejection, and is met by the references as discussed above. Claim (25) however also recite the following limitation: “write current amount and a first boost amount are supplied to the transducer head (Col. 10, L. 22-44 and explanation of Fig. 7, it is inherent in the art that when the current is augmented, the current has the previous current value plus a boosting current, which boosts the current to a greater value.)”.

Regarding Claim 22, Takahashi et al. teach all the limitations of Claim 21. Takahashi further teaches writing a test sequence to multiple data sectors on said disk surface using the maximum write current which satisfies said predetermined bit error rate and reading servo sector position data using said read head immediately after said step of writing (Col. 10, L. 22-50, wherein Takahashi teaches writing a test sequence and then reads the data in order to determine its error rate.).

Regarding Claim 23, Takahashi teaches all the limitations of Claim 22. Takashi further teach wherein said write induced instability test is not satisfied if an error exists in reading the servo sector position data (Col. 10, L. 22-50).

Regarding Claims 26, Takahashi teaches all the limitations of Claim 25. Takahashi further teaches measuring a temperature of said disk drive (Element 17), wherein said disk drive is at a second temperature altering at least one of said first nominal write current amount and said first nominal write current boost amount to obtain

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at least one of a temperature compensated write current amount and write current boost amount; providing said at least one of said temperature compensated write current amount and said temperature compensated write current boost amount to said transducer head (See description of Fig. 7).

Regarding Claim 27, Takahashi teaches all the limitations of Claim 26. Takahashi further teaches wherein said step of altering comprises: applying said second temperature to an algorithm to obtain a correction amount and applying said correction amount to at least one of said first nominal write current amount and said first nominal write current boost amount (See description of Fig. 7).

Allowable Subject Matter

3. Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the primary reason for allowable subject matter is the inclusion of if the maximum write current which satisfies the predetermined bit error rate does satisfy the write induced instability test, then determining whether the maximum write current which satisfies the predetermined bit error rate also satisfies a pole tip protrusion test and if the maximum write current which satisfies the predetermined bit error rate does not satisfy the pole tip protrusion test, then reducing the maximum write current until the pole tip protrusion test is satisfied.

Response to Arguments

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4. Applicant's arguments with respect to claims 21-27 have been considered but are moot in view of the new ground(s) of rejection due to the newly added Claims.

5. Examiner acknowledges that Claims 1-20 have been cancelled in the Applicant's Response dated 12/20/05.

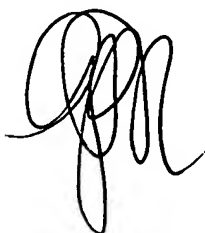
Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: 2003/0072100 to Lee et al. and 2005/0146803 to Kim et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenda P. Rodriguez whose telephone number is (571) 272-7561. The examiner can normally be reached on Monday thru Thursday: 7:00-5:00; alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


A handwritten signature in black ink, consisting of a series of loops and flourishes, likely belonging to the examiner or supervisor mentioned in the text.

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01/17/06.


DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 8000